

56. (Previously Added) A method comprising:
- C1  
preparing an *n*-type substrate;  
forming a first gate structure including only blanket implants; and  
forming a second gate structure including an NWELL using only one mask.

### REMARKS

Claims 36 and 38 are amended; no claims are canceled or added; and as a result, claims 1-6, 9, 10, 17, 18, 36, 38 and 45-56 are now pending in the application.

Claims 7, 8, 11-16, 19-35, 37, and 39-44 (species II-IV) were previously canceled. However, at least claim 1 is generic. If claim 1 is found allowable, then applicant will reinstate the subject matter of claims 7, 8, 11-16, 19-35, 37, and 39-44.

### §112 Rejection of the Claims

Claims 1-4, 5-6, 9-10, 17-18, 36, and 45-55 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant traverses the rejections of claims 1-4, 5-6, 9-10, 17-18, 36, and 45-55.

The office action states: "The original disclosure does not teach forming a gate structure or dual gate structure using only one mask as recited in present claims 1, 5, 9, 17, and 36." The office action continues "The original disclosure only provides the teaching for forming a gate layer forming a gate or gate structure." Applicant respectfully disagrees.

Applicant submits that the claims are fully enabled by the specification. For example, specification page 3, lines 13-16 describe the invention. As a further example, Figures 4A, 4B and 4C illustrate one embodiment of the invention. A summary description of Figures 4A, 4B and 4C found at page 5 of the specification follows: "Figures 4A-4C illustrate, in a sequence of cross-sectional views, an example embodiment of a dual doped gate structure of the present invention formed using one masking operation after a blanket PWELL is formed through a sacrificial oxide." Even this summary description when read with reference to the drawings

clearly discloses to one of ordinary skill in the art how to make a gate structure or dual gate structure using only one mask. Further enablement for this embodiment is provided in the description included on pages 5-8 of the specification. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 1-4, 5-6, 9-10, 17-18, 36, and 45-55.

It appears that the examiner is attempting to force the applicant to use the phrase "gate layer" in place of the phrase "gate structure". Applicant will not change the phrase "gate structure" in the claims. Gate structure is fully supported in the specification and figures. The applicant has the right to be his own lexicographer and has chosen the phrase "gate structure" to describe the invention. See, e.g., MPEP 2173.01 and 2173.02. The examiner clearly understands the invention as he has suggested alternate terms for the claims and rejected claims based on 35 USC 102 and 103. Accordingly, the claims are fully supported by the specification and one of skill in the art would readily understand the claimed subject matter in view of the specification. Withdrawal of this rejection is requested.

Claim 56 was rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant traverses the rejection of claim 56.

The office action states that "The original disclosure does not teach forming the first gate structure including only blanket implants."

Applicant submits that claim 56 is fully enabled by the specification. For example, Figures 6A, 6B and 6C illustrate one embodiment of the invention. Specification page 11, line 5 and line 15 describe a PWELL 605 as formed by a blanket implant and a blanket threshold voltage adjust region 609. Specification page 12, lines 15-16 describe the polysilicon layer 617 being formed by a blanket implant. Accordingly, a first gate structure including only blanket implants is described. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claims 56.

Claims 1-4, 5-6, 9-10, 17-18, 36, 38, and 45-56 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention. Applicant traverses the rejections of claims 1-4, 5-6, 9-10, 17-18, 36, 38, and 45-56.

35 U.S.C. § 112, second paragraph, is directed to claim scope. The office action states: "In claims 1, 5, 9, 17, 36 and 56, it is unclear how a gate or a gate structure is formed using only one mask." However, this statement does not support a 35 U.S.C. § 112, second paragraph claim rejection because it is not directed to claim scope. Further, the undersigned believes that this statement infers an enablement issue not an indefiniteness issue. Still further, the standard set forth in MPEP 2173.02 states that an examiner's focus is whether the claim meets the threshold requirements for clarity and precision, not whether more suitable language or modes of expression. Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire. Definiteness of claim language must be analyzed, not in a vacuum, but in light of (A) the context of the particular disclosure; (B) the teachings of the prior art; (C) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. The office action does not provide this analysis.

Thus, the rejection is unsupported and hence improper. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 1-4, 5-6, 9-10, 17-18, 36, 38, and 45-56.

Similarly, in rejecting claims 36 and 38 under 35 U.S.C. § 112, second paragraph, the office action addresses issues other than claim scope, so the rejections of claims 36 and 38, under 35 U.S.C. § 112, second paragraph, are improper. Applicant amends claims 36 and 38 for clarification. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 36 and 38.

#### §102 Rejection of the Claims

Claims 1 and 3 were rejected under 35 U.S.C. § 102(b) as being anticipated by Liu (U.S. 6,030,861). Applicant does not admit that Liu is prior art and reserves the right to swear behind Liu as provided for under 37 C.F.R. 1.131. Applicant traverses the rejections.

Liu does not qualify as prior art under 35 U.S.C. § 102(b). Only patents having an

effective issue date of more than one year prior to the effective filing date of an application qualify as prior art references under 35 U.S.C. 102(b). Liu's issue date is February 29, 2000. Applicant's effective filing date is February 13, 2001. Since February 29, 2000 is not more than one year prior to February 13, 2001, Liu's issue date is not more than one year prior to the applicant's effective filing date. Thus, Liu is not prior art under 35 U.S.C. 102(b). Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 1, 3, 5, 6 and 36.

The office action states "In response to the applicant's arguments in the bottom on page 4 of the amendment dated 09/03/02, it is submitted that the Liu patent has a filing date of Dec 30, 1997 and the present application has a filing date of Feb 13, 2001, therefore Liu patent qualifies as a prior art reference under 35 USC 102(b)." Applicant submits that this is an incorrect statement with regard to 35 USC 102(b). A person shall be entitled to a patent unless (b) the invention was patented or described in a printed publication in this country more than one year prior to the date of application for patent. Accordingly, the critical date for measuring prior art under 35 USC 102(b) is the publication date. In the present case, Liu has a publication date of Feb. 29, 2000. Applicant filed the present application within one year of Liu's publication date. As a result, Liu is not prior art under 35 USC 102(b). Withdrawal of this rejection is requested. In the alternative, applicant requests a cite to the MPEP or case law that indicates that a 35 USC 102(b) prior art is determined from the filing date of a US patent application.

Applicant requests clarification of the 35 USC 102(b) rejection as page 3 of the office action ends with the line "a gate oxide layer 18; and forming a polysilicon layer 20; and". This sentence is not completed on page 4 of the office action. Thus, the office action is incomplete.

Moreover, applicant can not find all of the features of claim 1 in Liu. For example, claim 1 recites forming one or more dual gate structures in the substrate using only one mask. Applicant can not find this feature in Liu. Liu describes using a two mask technique, i.e., self aligned mask to form the P-tank 12 and N-tank 14 (col. 2, lines 63-67) and oxide mask 22 (col. 3, lines 26-43). This is similar to the prior art described in the present application. Thus, applicant asserts that claim 1 and claim 3 depending from claim 1 are allowable over Liu. Reconsideration is requested.

§103 Rejection of the Claims

Claims 2 and 4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu (U.S. 6,030,861) and further in view of Gardner (U.S. 6,051,471). Applicant does not admit that Liu or Gardner is prior art and reserves the right to swear behind each. Applicant traverses the rejections of claims 2 and 4. Claims 2 and 4 depend from claim 1 and are believed to be allowable therewith.

Conclusion


Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone applicant's attorney at 612-349-9587 to facilitate prosecution of the application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

HOWARD E. RHODES

By his Representatives,  
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
(612) 349-9587

Date 7 March 2003 By   
Timothy B. Clise  
Reg. No. 40,957

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 7th day of March, 2003.

Name Amy Moriarty

Signature 